# TIKRIT LOCATION COMMAND PROJECT ACHIEVING CONTRACT GOALS BY USING SOUND MANAGEMENT PRACTICES

SIGIR 09-024 July 30, 2009



Special Inspector General for IRAQ Reconstruction

**Summary of Report: SIGIR 09-024** 

#### Why SIGIR Did This Study

SIGIR has a legislative requirement to prepare a final forensic audit on funds made available for Iraq reconstruction prior to its termination. This review examines the Tikrit Location Command, a \$37.8 million project to construct a new area support base for the Iraqi Army. The project is a joint effort between the Multi-National Security Transition Command-Iraq (MNSTC-I) and the Iraq Training and Advisory Mission-Army (ITAM). The Joint Contracting Command-Iraq/Afghanistan awarded the contract and is responsible for contract oversight. The Gulf Region-North District (GRN) of the U.S. Army Corps of Engineers provides program management and engineering oversight. The project is funded by the Iraq Security Forces Fund (ISFF).

SIGIR's objectives were to examine contract costs, outcomes, management oversight, and issues related to the transfer and sustainment of the project, with an emphasis on vulnerabilities to fraud, waste, and abuse.

#### **Lessons Learned**

As SIGIR has previously identified in other reconstruction projects, involving GOI officials in the design and construction phases of projects that they will ultimately use contributes to GOI acceptance of and commitment to the project. Further, requiring project managers to implement lessons learned from other reconstruction projects helps to achieve better overall program management and outcomes. Iraq lessons should be shared with reconstruction project managers in Afghanistan.

MNSTC-I provided written comments, and ITAM provided technical comments, which we incorporated in the report as appropriate.

July 30, 2009

## TIKRIT LOCATION COMMAND PROJECT ACHIEVING CONTRACT GOALS BY USING SOUND MANAGEMENT PRACTICES

#### What SIGIR Found

Completing the Tikrit Location Command project has taken longer than originally planned; nevertheless, the project has not experienced cost growth, the facilities are nearing completion, project management oversight controls are working well, and plans for transferring and sustaining the project are being developed.

As of May 2009, the contractor is meeting the requirements of the contract, and cost disbursements were commensurate with management's estimate of the construction status. The building exteriors are mostly complete, and the contractor is completing the interiors and other infrastructure and is adding the utilities. The GRN Program Manager estimates that overall construction is 78% complete, and both the GRN manager and the contractor believe that construction will be completed by the end of the current period of performance, which is September 26, 2009. About \$25.2 million of the \$37.8 million—nearly 67% of the modified contract price—has been disbursed to the contractor.

Strong program, project, and contract management controls were in place from the beginning of this contract, and they have improved over time. When construction deficiencies were identified, action was taken to resolve the issues. Additionally, lessons learned from prior construction projects were implemented. MNSTC-I officials indicated that a good security situation at Tikrit, among other factors, contributed to the positive outcome.

The project is approximately three months from its scheduled completion date. Thus, it has not yet been transferred to the Government of Iraq (GOI). Nonetheless, MNSTC-I has an asset transfer plan in place and is working with the GOI to address several training and sustainment issues, including securing an adequate power supply for the facility and training Iraqis to operate the reverse-osmosis water treatment facility. To monitor the project after its transfer, a logistics military advisory team will be located at the site to advise the location command's commander. A logistics training assistance team will also be formed to provide focused training, and ITAM officials will conduct capability assessments to track the GOI's progress in base services, water treatment, and other areas.



#### SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

July 30, 2009

MEMORANDUM FOR U.S. SECRETARY OF DEFENSE

U.S. SECRETARY OF STATE
U.S. AMBASSADOR TO IRAQ
COMMANDER, U.S. CENTRAL COMMAND
COMMANDING GENERAL, MULTI-NATIONAL FORCE-IRAQ
COMMANDING GENERAL, MULTI-NATIONAL SECURITY
TRANSITION COMMAND-IRAQ
COMMANDING GENERAL, U.S. ARMY CORPS OF ENGINEERS
COMMANDER, JOINT CONTRACTING COMMAND-IRAO/AFGHANISTAN

SUBJECT: Tikrit Location Command Project Achieving Contract Goals by Using Sound Management Practices (SIGIR 09-024)

The Special Inspector General for Iraq Reconstruction (SIGIR) is providing this audit report for your information and use. The report discusses current reconstruction efforts at the Tikrit Location Command. We performed this audit in accordance with our statutory responsibilities under Public Law 108-106, as amended. This law provides for independent and objective audits of policies designed to promote economy, efficiency, and effectiveness of programs and operations and to prevent and detect fraud, waste, and abuse. This audit was conducted as SIGIR project 9017.

This report does not contain recommendations; accordingly, the addressees were not required to provide comments. However, the Multi-National Security Transition Command-Iraq provided written comments, which we incorporated in the body of the report as appropriate and included in Appendix E. The Iraq Training and Advisory Mission-Army also provided technical comments, which we incorporated.

We appreciate the courtesies extended to the SIGIR staff. For additional information on the draft report, please contact Joan Hlinka, Deputy Assistant Inspector General for Audits (Washington, DC), (703) 604-0945/ joan.hlinka@sigir.mil, or Nancee Needham, Deputy Assistant Inspector General for Audits (Baghdad), (240)-553-0581, ext. 3793/nancee.needham@iraq.centcom.mil.

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#### Tikrit Location Command Project Achieving Contract Goals by Using Sound Management Practices

**SIGIR 09-024** 

July 30, 2009

#### Introduction

The Tikrit Location Command is a \$37.8 million project funded by the Iraq Security Forces Fund (ISFF) to build a new location command near the city of Tikrit. Iraqi Army location commands provide direct support to a specific division and tenant units. Support includes third line supply, maintenance support, base management, and life support. The project is a joint effort of the Multi-National Security Transition Command-Iraq (MNSTC-I) and the Iraq Training and Advisory Mission-Army (ITAM). The Joint Contracting Command-Iraq/Afghanistan (JCC-I/A) awarded the Tikrit Location Command contract on May 23, 2008, and is responsible for contract oversight. The Gulf Region Division-North District (GRN) of the U.S. Army Corps of Engineers (USACE) provides program management and engineering oversight.

Public Law 108-106, as amended, requires that the Special Inspector General for Iraq Reconstruction (SIGIR) prepare a final forensic audit report "on all amounts appropriated or otherwise made available for the reconstruction of Iraq." To help meet this requirement, SIGIR is reviewing major Iraq reconstruction contracts. These audits examine contract costs, outcomes, management oversight, and issues related to the transfer and sustainment of the project, with an emphasis on vulnerabilities to fraud, waste, and abuse.

#### **Background**

The Tikrit Location Command, located between the cities of Tikrit and Baiji, is one of 13 area support bases that are being established throughout Iraq. When completed, it should provide a fully functional and self-sufficient logistics complex for the Iraqi Army's Fourth Division and other security forces in the Tikrit area. The completed project will provide billeting for approximately 1,000 troops, supply warehouses and other storage areas, repair and maintenance facilities, a dining facility, and other buildings. Location commands are part of a larger goal to develop logistics capabilities within the Iraqi Security Forces. For the project's site layout, see Figure 1.

<sup>&</sup>lt;sup>1</sup> Tikrit is one of four newly constructed location commands. The other nine location commands are reconstruction and renovation projects.

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Power Generation
Plant

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Figure 1—Tikrit Location Command Site Plan

Source: U.S. Army Corp of Engineers-Gulf Region North District

The Tikrit Location Command contract (W91GY0-08-0027) was awarded as a sole source contract, as allowed under Section 886 of the Fiscal Year 2008 National Defense Authorization Act.<sup>2</sup> Section 886 permits the use of other-than-competitive procedures to award a contract to a particular source from Iraq or Afghanistan if the product or service to be acquired is in support of military operations or stability operations in Iraq or Afghanistan. Before using these procurement strategies, the Secretary of Defense must make a determination that the product or service being procured is to be used only by the military forces, police, or other security personnel of Iraq or Afghanistan, or that it is in the national security interest of the United States.

SIGIR reviewed the available award documentation for the Tikrit Location Command contract and noted that it included adequate justification for the use of the procedures allowed under Section 886. Specifically, the award file contained a memo, dated March 28, 2008, from the Director for Defense Procurement, Acquisition Policy, and Strategic Sourcing in Acquisition, Technology, and Logistics to the Commander, JCC-I/A, which delegated the authority and responsibility to make determinations required by Section 886(b). The file also contained two

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<sup>&</sup>lt;sup>2</sup> Public Law 110-181, January 28, 2008.

determination-and-findings memos issued by JCC-I/A, which stated that the Tikrit Location Command will be used exclusively by the Iraqi Security Forces.

Typically, the Federal Acquisition Regulation requires a contracting officer to provide a detailed justification when using procurement mechanisms other than full and open competition. However, these justification requirements do not apply to procurements under Section 886.

The contract price has been modified twice:

- In September 2008, the construction of ammunition storage facilities was eliminated from the contract, reducing the contract price by \$3,296,800.
- Also, in September 2008, modifications were made for additional roadways, parking areas, and lighting, increasing the price of the contract by \$2,110,000.

The net effect of these changes was to reduce the overall contract price from \$38,994,630 to \$37,807,830.

In addition to these price changes, the period of performance for this contract has been extended four times, without an increase to the contract's fixed price. The initial period of performance was 210 days after the contractor signed the notice to proceed. In August 2008, 17 days were added to the period of performance after the discovery of explosive ordnance at the construction site. In April 2009, 150 days were added to the period of performance based on a USACE government estimate of the time needed for construction required under the contract. Also, in April 2009, another 29 days were added for the installation of a well. Finally, in May 2009, the contractor was granted an additional 66 days based on requests for equitable adjustments for weather, holiday, and security delays. Key dates and events for the contract are shown in Table 1.

Table 1—Key Dates and Events for Contract W91GY0-08-C-0027

DATE	CONTRACT EVENT	
May 23, 2008	Contract awarded.	
June 11, 2008	Notice to proceed signed by contractor; period of performance began.	
June 17, 2008	1st modification: Implemented scope changes per GRN's Bid-ability, Constructability, and Operability Review.	
July 14, 2008	Construction began.	
August 7, 2008	2nd modification: Extended contract period of performance from 210 to 227 calendar days due to delays caused by unidentified explosive ordnance.	
August 21, 2008	3rd modification: Incorporated assignment of claims regulatory clause. No cost or period of performance changes.	
September 6, 2008	4th modification: 1) Suspended work because of safety and quality concerns. Required contractor to submit acceptable recovery plan for all deficiencies. 2) Terminated structures for ammunition personnel offices (\$113,300) and an ammunition supply point (\$3,183,500) for the convenience of the government. Total cost decreased by \$3,296,800— from \$38,994,630 to \$35,697,830.	
September 15, 2008	5th modification: Lifted suspension of work; recovery plan was submitted.	
September 29, 2008	6th modification: Incorporated revisions to the technical requirements of the contract to include roadways, parking lots, and lighting additions. Total cost increased by \$2,110,000—from \$35,697,830 to \$37,807,830.	
April 7, 2009	7th modification: Extended period of performance from 227 to 377 calendar days. Added contractor employee legal requirements clause.	
April 25, 2009	8th modification: Extended period of performance from 377 to 406 calendar days for tasks related installing a well, such as material and equipment delivery.	
May 30, 2009	9th modification: Extended period of performance from 406 to 472 calendar days based on the contractor's request for equitable adjustment (days lost for major holidays, severe weather and security incidents, and other items involving design work for the location command).	
September 26, 2009	Current period of performance ends.	

Source: SIGIR Analysis of Contract Documents

#### **Responsible Organizations**

#### Multi-National Security Transition Command-Iraq (MNSTC-I)

According to United Nations Resolution 1546 (June 8, 2004), Multi-National Force-Iraq (MNF-I) was to help build the capability of the Iraqi Security Forces and institutions through a program of recruitment, training, equipping, mentoring, and monitoring. On June 28, 2004, MNSTC-I was established as a subordinate MNF-I organization to execute this mission.

MNSTC-I's mission is to help the GOI develop, organize, train, equip, and sustain the Iraqi Security Forces and ministries so they are capable of defeating terrorism and providing a stable environment in which representative government, individual freedom, the rule of law, and free market economy can evolve, according to MNSTC-I's 2007 Campaign Action Plan. The success of the mission will contribute to Iraq's external security and the security of the Gulf region.

This modification incorrectly changed the period of performance from 240 to 257 calendar days. The 5th modification corrected the change in the

period of performance from 210 days to 227 days.

Federal Acquisition Regulation 52.232-23 allows the contractor to assign its rights to be paid amounts due or to become due as a result of the performance of the contract to a bank, trust company, or other financing institution, including any federal lending agency.

#### Joint Contracting Command-Iraq/Afghanistan (JCC-I/A)

On November 4, 2004, the Joint Contracting Command-Iraq was created to provide contracting services in support of Iraq relief and reconstruction.<sup>3</sup> On July 6, 2005, its mission was expanded to include Afghanistan, and JCC-I became known as Joint Contracting Command-Iraq/Afghanistan (JCC-I/A).<sup>4</sup>

The mission of JCC-I/A in Iraq is to provide responsive and effective contracting support of vital supplies, services, and construction to the Chief of Mission and MNF-I.

#### Gulf Region Division (GRD)

Since March 2003, USACE has been involved in Iraq reconstruction, providing contingency engineering support through the deployment of field engineering teams and electricity and oil restoration task forces. To consolidate its Iraq operations under a single general officer and to provide long-term engineering support for military operations, USACE activated GRD in January 2004. GRD provides full-spectrum engineering and logistical services in support of civil/military construction in Iraq at its Baghdad headquarters and three districts: Gulf Region North (GRN), Gulf Region Central, and Gulf Region South. GRD also provides services to MNF-I and the GOI.

#### Iraq Training and Advisory Mission-Army (ITAM)

ITAM's mission is to advise and support the Iraqi Joint Headquarters in developing institutional capacity at a strategic level and a self-reliant and effective headquarters that can command, generate, and sustain the Iraqi Joint Forces in accordance with the approved National Military Strategy. ITAM advises and enables the Iraqi Joint Headquarters and Army to develop a professional, self-sustaining initial ground-defense force.

#### **Objectives**

Our reporting objectives for this audit were to examine contract costs, outcomes, management oversight, and issues related to the transfer and sustainment of the project, with an emphasis on vulnerabilities to fraud, waste, and abuse.

For a discussion of the audit scope and methodology, and a summary of prior coverage, see Appendix A. For a summary of contract costs by line-item number, see Appendix B. For acronyms used, see Appendix C. For a list of the audit team members, see Appendix D. For MNSTC-I's written response, see Appendix E.

<sup>&</sup>lt;sup>3</sup> Fragmentary Order 09-668, Contracting and Organizational Changes, "Evolution of JCCI," *Army Acquisition, Logistics, and Technology*, January-March 2006.

<sup>&</sup>lt;sup>4</sup> The mission was expanded in Fragmentary Order 09-270, Contracting and Organizational Changes, July 6, 2005.

# **Contract Cost and Outcome Goals Are Being Achieved**

As of May 31, 2009, the contractor appears to be meeting the contract's cost estimates and desired construction outcomes. Funds are reportedly being disbursed commensurate with management's estimate of the status of construction. GRN Program Managers estimate that overall construction is 78% complete; GRN managers and the contractor stated that construction will be completed by the end of the current period of performance, which is September 26, 2009. About \$25.2 million of the \$37.8 million—almost 67% of the modified contract price—has been disbursed to the contractor. Although we did not assess the quality of construction, we did observe that the building exteriors are mostly complete and that the contractor was working to complete the interiors and infrastructure and to add utilities. Strong management oversight practices contributed to the success of this project, including:

- considering the lessons learned from previous reconstruction projects in Iraq
- building to Iraqi capacity
- in-depth program and project management controls

#### **Costs Are Consistent with Work Performed**

As of May 31, 2009, the total modified value of the contract is \$37,807,830. This amount is lower than the initial contract amount of \$38,994,630 because two contract modifications affected cost. One modification removed the offices for ammunition personnel and the ammunition storage facilities from the contract, which decreased cost by \$3,296,800. MNSTC-I officials told us that the Iraqis were not interested in having an armory at the Tikrit Location Command. Another modification added technical specifications to the roadways, parking lots, and lighting protection requirements, which increased costs by \$2,100,000. The combined result was a net decrease of \$1,186,800.

As of May 2009, almost 67% (\$25,158,693) of the total contract amount has been disbursed. Agency officials told SIGIR that they view present outcomes positively, and we note that disbursements correspond with reported construction progress. Table 2 summarizes reported construction status, obligations, and disbursements for selected contract line items.

Table 2—Comparison of Costs Incurred Through May 2009 to Work Performed

Contract Line Item	SIGIR OBSERVATION OF CONSTRUCTION STATUS	Approved Obligation	AMOUNT DISBURSED	PERCENT DISBURSED	REPORTED CONSTRUCTION PERCENTAGE COMPLETED
Power Generation	Six centrally located diesel generators are on site but not yet installed.	\$4,850,000	\$3,768,750	78%	85%
NCO Billeting	Shell and interior flooring complete. Drop ceiling and wiring in process.	\$2,376,000	\$2,091,600	88%	85%
Support Unit Section Facility	Shell and interior floor complete. Electrical works and partition walls in process.	\$2,309,100	\$1,248,602	54%	85%
Enlisted Billeting	Shell and interior flooring complete. Drop ceiling and wiring in process.	\$1,986,600	\$1,687,576	85%	85%
Bulk Storage Fuel Point	Tanks nearly complete. Installation of pipes about to begin.	\$3,000,000	\$1,980,000	66%	78%
Class I Frozen Storage Warehouse	Shell and insulated floor complete. Placing hangers for electrical trays and plumbing. Cold room installation about to begin.	\$1,555,000	\$848,000	55%	75%
Ice Factory	Column and rafter installation complete. Installation of ice units about to begin	\$1,513,000	\$475,000	31%	57%
All Other Line Items		\$23,218,130	\$13,059,165	56%	N/A¹
Total for All Contract Line Items	V	\$37,807,830	\$25,158,693	67%	78%

#### Note:

SIGIR could not determine the construction completed percentage because we combined a number of individual line items into this one category. For example, this category includes such diverse items as mobilization, insurance, and the construction of a bakery and medical clinic. See Appendix B for reported construction percentage completed for all line items.

Source: SIGIR observations during site visit, GRN data, and SIGIR analysis of GRN data.

Table 2 compares the reported percentage complete to the percent disbursed. This analysis shows that for the larger line items, construction is near or ahead of amounts disbursed for the line item. The Contracting Officer's Representative (COR) informed us that in those cases where disbursements are higher than construction status, the situation is likely due to the purchase of materials necessary before construction can proceed. For example, steel purchases are a significant portion of the contract line item for a steel framed building. In total, nearly 67% of the contract price has been disbursed; nevertheless, as of May 2009, the project is 78% complete, according to the bi-weekly, line item by line item assessment prepared by GRN. Based on GRN's assessment of construction status, it appears likely that sufficient funds will be available for the remaining work.

MNSTC-I officials have stated that they do not believe that the contract cost will increase significantly; however, final costs have not yet been determined. Price stability can be attributed largely to the fact that firm-fixed-price contracts place maximum risk and responsibility for costs on the contractor. Generally, firm-fixed-price contracts provide maximum incentive for the contractor to control costs and perform effectively.

To attempt to verify whether the negotiated, firm-fixed-price was appropriate, we reviewed documents related to the contract's award and price negotiations. We noted that JCC-I/A compared the contractor's proposal to an independent government estimate and other proposals received for similar work. We also noted that the independent government estimate was questionable, and the price range that JCC-I/A used during negotiations with the contractor seemed wide—\$31.0 million minimum, \$46.3 million maximum. Nevertheless, the contract price of just under \$39 million was in line with the three other new-build location commands—Al Shaiba (\$42.7 million), Al Memona (\$35.9 million), and Al Ghizlani (\$32.4 million)—and it was also in line with most of the proposals JCC-I/A received for similar work. Based on this

information and our observations of construction completed to date and the costs to date, the price appears to be reasonable.

#### **Contract Objectives Are Being Achieved**

The Tikrit Location Command contract is a firm-fixed-price contract that required the contractor to prepare detailed design plans based on an initial U.S. government-supplied site plan and to build the location command. The plan includes approximately 62 buildings, necessary utilities, and other improvements to support a 1,000-man facility. The site Program Manager and COR stated that the project started slowly, primarily because the contractor took longer than anticipated to design the project, but construction is now going well. Most of the buildings provided under this contract are shells with finish work kept to a minimum; farm-grade fixtures were used in many applications. Figure 2 is an aerial view of the Tikrit Location Command.

Figure 2—Aerial View of the Tikrit Location Command

Source: GRN

SIGIR visited the Tikrit Location Command on May 27, 2009. SIGIR did not conduct an engineering assessment of construction quality during the visit; however, SIGIR plans to conduct such an assessment in the near future. At the time of our visit, we noted that concrete work and most building exteriors were complete and that the contractor was installing wiring and running power lines to the buildings. In the billeting structures, flooring was complete, and framing for drop ceilings was in place. Workers were in the process of installing electrical conduit and outlets. Figure 3 shows the interior of enlisted and non-commissioned officer billeting.

Figure 3—Interior of Enlisted and Non-commissioned Officer Billets



Source: SIGIR photo from site visit

During our site visit, we also noted that latrine construction was underway. Concrete block walls were in place and the plumbing was partially installed, but concrete flooring, doors, windows, and interior finish remained to be completed. Figure 4 below shows the exterior and interior of a latrine.

Figure 4—Example of the exterior and interior construction status of latrines



Source: SIGIR photo from site visit

Also, during our site visit we noted that the contractor was in the process of installing street lights and power lines, erecting fresh water tanks, and welding fuel tanks. Six diesel generators were on site but had not yet been installed. Similarly, a reverse-osmosis water treatment plant was on site but had not yet been installed. Also, the well for a water supply had not yet been drilled. Figure 5 shows the six diesel generators and construction of fuel tanks.

Figure 5—Diesel Generators and Fuel Tanks



Source: SIGIR photo from site visit

The original 210-day period of performance for construction has been extended four times through contract modifications. The period of performance was extended for various reasons, primarily because of a government estimate that provided a more realistic period of performance. After all modifications to the contract, the current period of performance is 472 days. Although a considerable amount of work remains to be done, the Project Manager, COR, and the contractor believe that the project will be completed by the end of the current period of performance.

# **Program, Project, and Contract Management Were Strong**

Program, project, and contract management controls were in place at the beginning of this contract and improved over time. This resulted in the identification and remediation of a number of construction deficiencies and the continuing progress of the project. Program and project management have succeeded on this contract due to effective planning, commitment of resources, on-site representatives, a good working relationship with the contractor, and a periodic reporting process that provides informational awareness. In written comments on a draft of this report, MNSTC-I attributed the success of the project to a secure environment at the construction site, the short distance between the GRN resident office and the construction site, and unrestricted access to the construction site.

#### **Effective Program and Project Management Controls Were Used**

GRN put an effective on-site Quality Assurance (QA) system in place that used from one to four local nationals as on-site representatives and the COR as reviewer. As of May 2009, at least two and as many as four QA representatives were on site every day. The COR was located near the project site and made regular site visits. The COR received daily reports from the QA representatives and reviewed progress reports and contractor invoices for receipt of goods and services and percentage complete. We noted instances where the COR challenged the contractor's billed amounts and occasionally returned invoices for correction. The COR signed off on contractor invoices prior to payment. Detailed records were maintained documenting the QA process.

The QA process was successful in identifying construction deficiencies, which were corrected without an increase in the contract's fixed price. For example, block-and-mortar latrines were found to be construction-deficient so the contractor was required to demolish and rebuild them. QA representatives noted another deficiency—the quality of concrete being delivered. The drivers would add water en route, causing inconsistent batches. To remedy the situation, the contractor switched to small on-site batch processing.

In addition to the local COR, a local Program Manager works with the COR and liaisons with the MNSTC-I Program Manager. This allows the COR to easily elevate issues, such as safety and construction deficiencies, to the Administrative Contracting Officer (ACO) and MNSTC-I officials. For example, the ACO issued a stop-work order when the contractor failed to implement safety standards and lifted the order as soon as the contractor took corrective action. Also, the local Program Manager prepares weekly project status reports for MNSTC-I officials.

The MNSTC-I Program Manager regularly communicates with and receives weekly project status reports from the local GRN Program Manager. The MNSTC-I Program Manager reviews these reports and prepares a monthly status briefing for ITAM.

In written comments on a draft of this report MNSTC-I highlighted conditions which contributed to the success of the project. MNSTC-I indicated that the construction site is located in a

relatively secure environment, which permitted government personnel to spend extended time on-site. During the time on-site, the government personnel could identify construction deficiencies and educate the contractor on quality standards. In addition, the short distance between the GRN resident office and the location command facilitated more timely and numerous site visits, which, according to MNSTC-I, improved construction oversight and allowed for better mentorship of the contractor. MNSTC-I also attributed site access as a factor that contributed to the success of the project. Construction sites that are on active Iraqi Army or Iraqi Police installations may have access restrictions that impact material deliveries or contractor personnel. MNSTC-I indicated that free movement at the Tikrit Location Command construction site allowed the contractor to execute construction as planned. See Appendix E for MNSTC-I's written response.

#### **Effective Contract Management Processes Were Used**

For this contract, JCC-I/A's MNSTC-I Support Division used a centralized file management system to maintain key contracting documents and correspondence. We reviewed the files and noted that they were well organized with checklists and tables of contents. Centralizing the contract documents provides a number of benefits:

- allows for better transition when there is a change in contracting officials
- provides a basis for decisions in the acquisition process
- supports actions taken
- provides information for reviews and investigations

To date, there have been only nine modifications to the contract. Other reconstruction contracts in Iraq have been modified more than 100 times, significantly increasing the value of the contract.

We also noted that the ACO is located close to the project and works closely with the GRN Program Manager and COR. The ACO reviews periodic program and project management reports. Being located close to the project and working with program and project management expedites contracting actions, such as the suspension of work that occurred briefly on this contract.

#### **Lessons Learned Have Been Implemented**

SIGIR has long reported on the importance of implementing lessons learned. In March 2009, MNSTC-I promulgated as official policy the best practices in construction gathered over the past year. Several of these lessons learned pertain to building only to the user's capacity and ability to maintain and operate the facility. For example, one lesson recommends the use of simple high-strength plumbing fixtures in barracks and gravity-fed water storage so that water will be available during a power failure. MNSTC-I requested that GRD and its subordinate districts implement the MNSTC-I lesson learned for all contracts under development and future contracts. MNSTC-I also requested that the GRD districts notify MNSTC-I of the cost and schedule

impacts, if any, to implement the lessons for contracts that were already under development, such as the Tikrit location command contract.

Both the MNSTC-I Program Manager and the COR expressed the importance of implementing lessons learned. Our review found that the GRN program manager was required to report to MNSTC-I on the status of 61 lessons learned.<sup>5</sup> GRN identified 53 of the 61 lessons learned as applicable to the Tikrit Location Command; of these, GRN reported that all but five had been implemented. Examples of lessons learned that have been implemented include:

- Consider placement and number of exterior lighting in conjunction with neighboring buildings.
- Back-up power should only be provided for mission critical facilities.
- Electrical wiring of buildings must ensure proper bounding.
- Load bearing masonry walls require vertical steel reinforcement.
- Contractors must have a comprehensive quality control plan.

The GRN's efforts to implement MNSTC-I's lessons learned appear to have had a positive impact on construction outcomes at the Tikrit Location Command.

<sup>&</sup>lt;sup>5</sup> The MNSTC-I policy contained additional lessons, which were not included in GRN's lessons learned status report. For example, MNSTC-I's policy included, but GRN's report to MNSTC-I did not include, the lesson to use simple charcoal filtering, chlorination, ultraviolet water treatment systems instead of reverse-osmosis units.

#### **Transfer and Sustainment Issues Are Being Addressed**

MNSTC-I has made efforts to involve GOI officials in the project, and their involvement has increased over the life of the project. Specific changes to the project have been made at the GOI's request, which should help ensure the successful transfer of the project. MNSTC-I and ITAM officials have procedures in place to facilitate the transfer. The major equipment systems will require continued maintenance for the location command to achieve its full capacity. The contract contains requirements for the contractor to provide classroom training for the major equipment systems; it also requires the contractor to warrant all equipment, material, and workmanship and to provide operations and maintenance on all installed equipment for 12 months after contract completion. The impact of these efforts remains to be seen, and it is up to the GOI to make the most of the U.S. investment.

# **GOI Input on Project Design Appears To Be Helping the Transfer Process**

At the onset of the project, Iraqi officials had limited involvement in the Tikrit Location Command project; however GOI involvement increased over the life of the project. A key Iraqi official we interviewed reported that initially there was no Iraqi involvement in the project's design. A senior ITAM official we interviewed stated that GOI officials did pick the location command construction sites. In January 2009, MNSTC-I held the first of three design review meetings in which Iraqi Army logistics officials were provided the opportunity to review the location commands' design plans and recommend changes. When the design review meeting was held for the Tikrit Location Command, construction had already begun. Nevertheless, the meeting culminated in specific changes that will be made at the GOI's request, such as relocating a parking lot to a site adjacent to the repair and maintenance company facility.

Iraqi input extended beyond these design review meetings. For example, a senior Iraqi logistics official responsible for the location commands told SIGIR that he specifically requested the water treatment system for installation at the site. In addition, during our site visit, one of the contractor's principals told SIGIR that an Iraqi Army official visits the site on a fairly regular basis to observe the status of construction.

MNSTC-I is currently negotiating a memorandum of understanding with the GOI that would grant Ministry of Defense engineers access to the location command sites still under construction and would give them a formal means for providing feedback and making recommendations, among other agreements, such as providing access to QA training materials. Given the amount of construction that has already been completed, the memorandum of understanding will likely not affect the Tikrit Location Command significantly, yet MNSTC-I officials believe it will have a positive impact on the other location commands.

To gain GOI's perspective on transfer and sustainment, we met with a key Iraqi official responsible for location commands. The official spoke favorably of the memorandum of understanding, which would allow an Iraqi engineer to participate in the on-site construction process. The Iraqi official also said that the Iraqi Security Forces are ready to take ownership of

the location command once construction is complete. Currently, soldiers are living in the desert in tents awaiting completion of construction.

# **Successful Transition and Sustainment Depends on Implementation of Existing Plans**

MNSTC-I officials told SIGIR that a process is in place to transfer the Tikrit Location Command to the Iraqis after it is completed. Letters are generally sent 90 days and 30 days prior to contract completion to alert the GOI that the project is nearing completion, and a recognition letter is signed by an appropriate GOI official when the project transitions. After transfer, the GOI is to supply most of the equipment to make the location command functional.<sup>6</sup>

ITAM and MNSTC-I officials also said that they have a number of plans to help the Iraqi Security Forces transition into the site. For example, once construction is complete, a logistics military advisory team will be located at the site; its main function will be to advise the commander of the Iraqi location command. A logistics training assistance team will also be formed to provide focused training, and ITAM officials will conduct capability assessments to track the GOI's progress in base services, water treatment, and other areas.

Several project sustainment issues remain but are being addressed by program officials. The Tikrit Location Command initially will be powered by a centralized group of six generators, which were being installed when SIGIR visited the construction site. During the time that the generators serve as the main source of power, fuel availability will directly impact the location command's activities. The Ministry of Electricity and the Ministry of Defense have established an agreement to connect the location commands to the national electric grid; nevertheless, as of June 2009, the initial utility assessment had not yet been conducted for the Tikrit Location Command, and the funding source to connect the location command to the grid has not been determined. MNSTC-I officials said that coalition funds might be used to assist the Iraqis in installing electrical power at the site.

Training in maintaining the electrical power system and the reverse-osmosis water treatment system also still must be conducted. The contractor is required to provide classroom training for the major systems; additionally, MNSTC-I officials said they plan to provide supplemental training on the water treatment system. When asked whether the GOI would fund periodic maintenance and repairs to keep the facility operating, the Iraqi official we interviewed responded that the GOI would fund needed maintenance and repair costs.

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<sup>&</sup>lt;sup>6</sup> One exception is the equipment to be used in the medical clinic, which will be provided through a separate, U.S.-funded effort

#### **Conclusion and Lesson Learned**

#### **Conclusion**

Notwithstanding unforeseen events, it appears that the Iraqi Army will receive the logistics complex that was envisioned at the outset of the contract, and costs will likely be in line with the contract amount. Effective program, project, and contract management practices and the implementation of lessons learned have contributed to the project's positive outcomes to this point. Further, involvement of GOI in the decision and implementation process of this project helped to create a sense of ownership and to help accomplish the transfer process. MNSTC-I's asset transfer plan and ITAM's military advisory and training assistance teams have set the framework to provide the GOI with the continued guidance and assistance needed to ensure sustainment of the project. Taken together, all of these efforts have reduced overall program risk and helped to protect this U.S. reconstruction investment.

#### **Lessons Learned**

As SIGIR has previously identified in other reconstruction projects, involving GOI officials in the design and construction phases of projects that they will ultimately use contributes to GOI acceptance of and commitment to the project. Further, requiring project managers to implement lessons learned from other reconstruction projects helps to achieve better overall program management and outcomes. Iraq lessons should be shared with reconstruction project managers in Afghanistan.

#### **Management Comments and Audit Response**

Since SIGIR did not make recommendations in this report, no management comments were required. However, MNSTC-I provided written comments, which we incorporated in the body of the report as appropriate and included in Appendix E, and ITAM provided technical comments, which we incorporated.

#### **Appendix A—Scope and Methodology**

The Special Inspector General for Iraq Reconstruction (SIGIR) initiated Project 9017 in April 2009 to examine contract costs, outcomes, and management oversight of a firm-fixed-price construction contract, W91GY0-08-C-0027, awarded to construct a location command in Tikrit, Iraq. The audit also addresses the GOI's involvement in the project and information related to the transfer and sustainment of the location command.

To provide information on the costs of the project, we reviewed documents supporting the contract award process, price negotiations, subsequent modifications to the contract, and payment data. To determine contract line-item obligations and disbursements through May 2009, we used data that the local program manager provided from the U.S. Army Corps of Engineers (USACE) financial management system, which we compared to and found consistent with payment documents in the contract files.

To determine the outcome of the project and assess project and contract oversight, we visited the construction site on May 27, 2009, where we observed the progress to date and spoke with one of the prime contractor's principals. We did not evaluate the adequacy of the location command's construction; SIGIR's inspections team will perform a subsequent analysis. In addition to the site visit, we reviewed the contract, modifications, quality control reports and plans, quality assurance reports and plan, program management reports, and other documents related to contract outcome and oversight, such as correspondence between the relevant contracting officials, program management officials, and the contractor. We also interviewed relevant officials from Joint Contracting Command—Iraq/Afghanistan, Multi-National Security Transition Command-Iraq (MNSTC-I), Iraq Training and Advisory Mission—Army (ITAM), and Gulf Region Division North District, and we questioned the current and former Contracting Officer's Representatives.

To provide information on Iraqi involvement in the project and information related to the transfer and sustainment of the location command, we reviewed related documents and interviewed appropriate MNSTC-I and ITAM officials. We also interviewed the Iraqi official responsible for location commands.

We performed this audit under authority of Public Law 108-106, as amended, which also incorporates the duties and responsibilities of inspectors general under the Inspector General Act of 1978, as amended. We conducted this review from May 2008 through July 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

#### **Use of Computer-processed Data**

We used computer-processed data minimally to perform this audit. To determine contract lineitem obligations and disbursements through May 2009, we used data that the local program manager provided from USACE's financial management system, which we compared to and found consistent with payment documents in the contract files. Accordingly, we determined that it was not necessary to perform substantive testing of the reliability of the computer-processed data.

#### **Internal Controls**

We identified and reviewed internal controls used in managing and administering the contract. Our review included controls related to the contract award and program management oversight. To conduct this review, we examined documents in the contract file, such as quality assurance reports, and held discussions with key oversight officials for insight on internal controls. We did not examine the contractor's internal management and financial controls. We presented the results of our review in the body of this report.

#### **Related Reports by SIGIR**

Prior SIGIR reports relevant to this audit are identified below and can be accessed at the SIGIR website <a href="http://www.sigir.mil">http://www.sigir.mil</a>.

Security Forces Logistics Contract Experienced Certain Cost, Outcome, and Oversight Problems, SIGIR-09-014, April 26, 2009.

Cost, Outcome, and Oversight of Iraqi Oil Reconstruction Contract with Kellogg Brown and Root Services, SIGIR-09-008, January 13, 2009.

Cost, Outcome, and Oversight of Local Governance Program Contracts with Research Triangle, SIGIR-09-003, October 21, 2008.

Outcome, Cost, and Oversight of the Security and Justice Contract with Parsons Delaware, Inc., SIGIR-08-019, July 28, 2008.

Outcome, Cost, and Oversight of Water Sector Reconstruction Contract with FluorAMEC, LLC, SIGIR-08-018, July 15, 2008.

### **Appendix B—Contract Costs by Line Item**

Summary of obligations, amount disbursed, and comparison of percent disbursed to percent complete, as of May 31, 2009.

DESCRIPTION OF WORK	APPROVED OBLIGATION	AMOUNT DISBURSED	PERCENT DISBURSED	CONSTRUCTION PERCENT COMPLET
Support Unit Section Facility	\$2,309,100	\$1,248,602	54%	85%
Admin and Logistics Facility	\$264,000	\$211,000	80%	85%
Training and Operations Facility	\$133,100	\$108,650	82%	80%
Narehousing Complex	\$262,350	\$210,025	80%	80%
evel 1 Medical Clinic	\$147,000	\$96,750	66%	75%
Repair and Maintenance Company Facility	\$946,150	\$792,725	84%	80%
Reclamation Platoon Facility	\$380,750	\$263,075	70%	78%
Guard and Protection Battalion Facility	\$142,450	\$90,000	63%	80%
Headquarters Company Facility	\$218,400	\$175,000	80%	75%
Military Police Platoon Facility	\$68,750	\$61,250	89%	75%
Convoy Protection Company Facility	\$228,800	\$175,000	77%	75%
Guard and Protection Company Facility	\$88,000	\$70,000	80%	75%
Rifle Platoon Facility	\$140,800	\$105,000	75%	80%
Class I Dry Food Warehouse	\$389,400	\$318,850	82%	78%
Class I Bulk Dry Food Warehouse	\$389,400	\$303,850	78%	75%
Class I Cold Storage Warehouse	\$1,375,000	\$948,000	69%	75%
Class I Frozen Storage Warehouse	\$1,555,000	\$848,000	55%	75%
Class I Fresh Produce Warehouse	\$1,195,000	\$778,000	65%	75%
Bakery	\$541,300	\$220,325	41%	75%
ce Factory	\$1,513,000	\$475,000	31%	57%
lammable Material Point Storage	\$175,000	\$143,500	82%	80%
Bulk Storage Petroleum, Oil, and Lubricant	\$3,000,000	\$1,980,000	66%	78%
Distribution Facility Petroleum, Oil, and Lubricant	\$1,581,400	\$1,026,480	65%	80%
Bulk Lubricant Storage	\$157,500	\$86,960	55%	75%
Varehousing Platoon Facility	\$1,452,680	\$1,050,000	72%	75%
ire Station	\$387,500	\$310,000	80%	75%
Officers Billeting	\$792,000	\$693,000	88%	85%
Ion-commissioned Officers Billeting	\$2,376,000	\$2,091,600	88%	85%
nlisted Billeting	\$1,986,600	\$1,687,576	85%	85%
atrines	\$570,000	\$259,000	45%	75%
Dining Facility	\$888,000	\$670,000	76%	85%
Morale, Welfare, and Recreation Facilities	\$378,400	\$250,000	66%	75%
otable Water	\$1,000,000	\$500,000	50%	75%
Vaste Water Management	\$800,000	\$706,000	88%	85%
ower Generation	\$4,850,000	\$3,768,750	78%	85%
Defense Base Act Insurance	\$175,000	\$36,725	21%	N/A
Mobilization and Demobilization	\$4,000,000.	\$2,400,000	60%	N/A
Operation and Maintenance Training	\$950,000	\$0	0%	N/A

Source: GRN Payment Records and Biweekly Project Status Reports

# **Appendix C—Acronyms**

ACRONYM	DESCRIPTION	
ACO	Administrative Contracting Officer	
COR	Contracting Officer's Representative	
GOI	Government of Iraq	
GRD	U.S. Army Corps of Engineers Gulf Region Division	
GRN	Gulf Region Division North District	
ISFF	Iraq Security Forces Fund	
ITAM	Iraq Training and Advisory Mission—Army	
JCC-I/A	Joint Contracting Command—Iraq/Afghanistan	
MNF-I	Multi-National Force-Iraq	
MNSTC-I	Multi-National Security Transition Command-Iraq	
P.L.	Public Law	
QA	Quality Assurance	
QC	Quality Control	
SIGIR	Special Inspector General for Iraq Reconstruction	
USACE	U.S. Army Corps of Engineers	

#### **Appendix D—Audit Team Members**

This report was prepared and the audit conducted under the direction of David R. Warren, Assistant Inspector General for Audit, Office of the Special Inspector General for Iraq Reconstruction.

The staff members who conducted the audit and contributed to the report include:

Paula A. Braun

Richard R. Kusman

Nancee K. Needham

#### **Appendix E—Management Comments**



#### MULTI-NATIONAL SECURITY TRANSITION COMMAND-IRAQ BAGHDAD, IRAQ APO AE 09348

04 July 2009

Ms. Ginger Cruz
Office of the Special Inspector General for Iraq Reconstruction (SIGIR)
Baghdad, Iraq

Dear Ms Cruz,

It is with pleasure that we read the results of the draft SIGIR report on the Tikrit Location Command project, in particular the strong program, project, and contract management aspects of the project. As discussed in the out brief, there were several conditions associated with this project which allowed an effective and efficient quality assurance (QA) program to be implemented. Many of these conditions do not exist on other project sites, which make implementing a sound quality assurance program a challenge. Not to diminish the tremendous efforts and superb team work of all involved with this successful project, I highlight below some of the special conditions which enhanced this successful QA program:

- a. Secure Environment The contractor and government personnel were allowed freedom of movement to and from the site without fear of personal safety. This allowed QA personnel to visit often, and stay on site for an extended period of time. The extended time onsite allowed the QA personnel to partner with the contractor in identifying construction deficiencies, and educating the contractor on western quality standards. Many construction sites across Iraq are not located in secure surroundings and thus QA personnel are not allowed onsite for an extend period of time, thus quality of work and quality expectations are more difficult to impart to the contractor.
- b. Distance from Resident Office The short distance between the Tikrit Residence office and the Tikrit Location Command site allowed more timely and numerous site visits by not only the assigned project QA personnel, but also specialized personnel from the Resident office. This ability to easily travel to the site allowed for more intense quality oversight of the work, and better mentorship of the contractor. Construction sites that require 2-4 hours to reach will be the projects with quality challenges as daily construction oversight is not achievable and contractor mentorship difficult.
- c. Site Access From all information gathered, access onto the project site was never a problem in regards to material deliveries or contractor personnel. This is not always the case, as delivery of critical construction materials and access of contractor personnel onto a construction site can be an extreme challenge. Construction sites that are on active Iraqi Army or Iraqi Police installations many times have access challenges, as entrance through the installation gates can be restrictive in regards to the throughput of construction personnel in the morning, delayed material deliveries throughout the day, and restrictive hours a contractor can work at night. The Tikrit Location Command allowed for free movement at all times allowing the contractor to execute his construction as planned.

	Respectfully,		
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9	Craig A. Fulton		
	CAPT, CEC, USN		
	MNSTC-I J7 (Engineer)		

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Congressional Affairs	Hillel Weinberg Assistant Inspector General for Congressional Affairs Mail: Office of the Special Inspector General for Iraq Reconstruction 400 Army Navy Drive Arlington, VA 22202-4704 Phone: 703-604-0368 Email: hillel.weinberg@sigir.mil	
Public Affairs	Daniel Kopp Assistant Inspector General for Public Affairs Mail: Office of the Special Inspector General for Iraq Reconstruction 400 Army Navy Drive Arlington, VA 22202-4704 Phone: 703-428-1217 Fax: 703-428-0818 Email: PublicAffairs@sigir.mil	